

# STATE OF NEW HAMPSHIRE OFFICE OF ENERGY AND PLANNING

OEP

4 Chenell Drive Concord, NH 03301-8519 Telephone: (603) 271-2155 Fax (603) 271-2615

# StayWarmNH Update Progress Report #3 – April 1, 2009

### **Overview:**

The StayWarmNH initiative evolved quickly over the last six months. Initially a program to temper winter's fury by helping NH's low-income residents save energy money through energy efficiency and weatherization measures, the program additionally helped prioritize homes for the Community Action Agencies. These foci stacked nicely atop each other. With \$23.2 M in new funding from the American Recovery and Reinvestment Act specifically for low-income weatherization programs, the StayWarmNH initiative helped the CAAs rampup operations, build a collaborative network, and expand awareness of the impacts of weatherization efforts.

Skyrocketing energy costs in the summer of 2008 were the catalyst for this collaborative, public-private partnership, funded by the Regional Greenhouse Gas Initiative and the NH Charitable Foundation. \$1.2 M was dedicated to expanded weatherization and air-sealing measures handled by the CAAs, and to develop programs for individuals to impact residential energy consumption and awareness, through volunteers and Do-It-Yourself winterization efforts. NHCF funded the Project Director's salary. The utilities released funds to similarly expand full weatherization programming. Energy costs dropped in autumn of 2008, after many people had already invested in heating fuels at the highest prices on record. LIHEAP funding increased, as did the eligibility threshold.

The program was separated into four levels, maximizing different resources.

#### **Level 1 – Supplemental Full Weatherization** (\$2,000-3,500/unit)

- Surpassed target (569 units targeted; 770 completed).
- Measures include blower-door testing, before and after, air sealing, blown-in insulation, wrapping of heat or water distribution systems, low-flow showerheads, reducing water heater temperatures, CO alarms, some furnace repair and replacement.

### **Level 2 – Expanded Air Sealing - Weatherization** (~\$1200/unit)

- Program started 2009, working to meet targets (569 units targeted; 472 completed) by 3/31/09; the CAAs are awaiting invoices for additional documentation.
- Similar to Level 1 without insulation or furnace replacement; some homes receive furnace tune-ups.
- Challenges with this program include management reorganization within some CAAs and the demands of ARRA planning and deadlines.
- Weatherization equipment purchased: 9 Blower Doors, 8 combustion analyzers, 4 vans, 5 insulation machines, 1 generator, insulation truck equipment, 6 computers, total estimated cost-to-date \$106,600.

#### **Level 3 – Volunteer Winterization** (~\$75/unit + overhead)

- Program winding down; (500 units targeted; 403+ homes completed); 485 registered volunteers
- Volunteers spend approximately 2 hours per site, educating homeowners about energy-saving and energy-safety issues, and installing 30+ products, including CO alarms.
- Product-installation/inspection checklists come back to StayWarmNH in SASEs for data entry, analysis, and then to the CAAs for prioritization for future weatherization needs.
- As of 4/1/09, 109 (27%) reported alarming problems or very high priority attention needed.
- Very positive feedback from volunteers, anecdotally and through 4 surveys.
- According to EnergyStar.gov, if only half the CFL lightbulbs provided by Levels 3+4 efforts (16,000 provided) replace 75-watt incandescent bulbs and are used for 3 hours/day, annual cost savings = \$101,616. Life-cycle cost savings = \$705,457, Life-cycle CO2 avoidance = almost 5 million pounds.

- Metrics for other energy saving/safety products are hard to quantify. Initial analysis concludes that significant energy-money-CO2 savings have been achieved.
- Logistical challenges: the ice storm, the human element, the time frame, exhaustion from winter
- Throughout the volunteer recruitment, training, and mobilization efforts, and then with our on-going communications with the Community Action Agencies, it became apparent that a modern web-based data-management system is a much-needed tool for future efforts.

#### **Level 4 – Do It Yourself StayWarm Kits** (~ \$30/unit)

- Program ongoing; (3500 targeted; 2800 have been distributed as of 3/27/09).
- CAAs distribute kits to income-qualified homeowners, CAAs track them
- DIY StayWarm kits do not have CO alarms, but are otherwise identical to kits installed by volunteers.

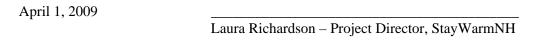
## StayWarmNH Targets and Accounting, as of March 30, 2009

Description	StayWarm	StayWarm	StayWarm Funds	StayWarm	Funding Source	Completion
	Target	Actual	Dedicated	Funds Spent		Date
		(as of date)				
Level 1						
	340	205	\$860,000	\$860,000	PSNH <sup>3</sup>	12/31/08
Full	15	168 <sup>1</sup>	\$44,000	\$44,000	Unitil	12/31/08
Weatherization	15	(3)	\$45,000	\$0	NHEC <sup>4</sup>	12/31/08
	0	(12)	\$0	\$0	NGRID	12/31/08
	44	208 <sup>2</sup>	\$115,357	\$381,885	Rolled-over WX funds	3/31/09
	155	204	\$750,000	\$464,000	FAP Furnace Program	9/31/09
					_	
Total	569	770	\$1,814,357	\$1,749,885		
Level 2						
Air Sealing	732	472 – as of 3/23/09	\$878,000	\$413,799 as of <i>3/31/09</i>	RGGI	3/31/09
Equipment		See below	\$120,000	106,000	RGGI	3/31/09
Level 3			_			
	500	403+	\$78,600 <sup>5</sup>	\$42,764.25	RGGI	3/31/09
Volunteer		as of 3/31/09				
Winterization						
Level 4						
	3,500	2800 as of	\$122,500	\$113,115	RGGI	3/31/09
DIY Winterization Kits		3/23/09				

#### **Conclusion:**

As StayWarmNH winds down for the 2008-09 heating season, additional analysis and reporting will help us make recommendations for future programming. Anecdotally, the CAAs report that ten (Level 3) volunteers have inquired about employment opportunities under ARRA as energy auditors and/or weatherization crews.

Energy savings associated with home weatherization, air-sealing, habit change, and even minor improvements is proven. Weatherization plugs the hole in the energy bucket, the bucket that continually gets refilled at escalating costs. Plugging that hole, or even slowing the leak, saves money and energy, plus it improves the comfort of the home. StayWarmNH has saved money and energy for New Hampshire's most vulnerable residents, connecting them to a new layer of social safety-net fabric, at a very low cost but with high social dividends. With more organizational time, a better data-management infrastructure, and the recruitment and nurturing of additional volunteer groups, this program can provide tremendous, long-lasting benefits.



<sup>&</sup>lt;sup>1</sup> Unitil weatherized multi-family units as well as single-family units.

<sup>&</sup>lt;sup>2</sup> This part of the contract was amended on October 8, 2008 and was not reflected in the Weatherization Targets and Funding Plan of October 20, 2008.

<sup>&</sup>lt;sup>3</sup> PSNH books close in February, target seems to be met, leftover money can rollover into 2009

<sup>&</sup>lt;sup>4</sup> NHEC transferred money to the CAAs in November, money did not get used before 12/31/08; NHEC money does not rollover, therefore it is being returned.

<sup>&</sup>lt;sup>5</sup> \$1600 was moved from Level 2 to Level 3 because of a tallying error on Level 2 that was initially signed in a contract.